

KS5 Manufacturing

E. Thompson

Spring 2022

Topic: Production Lines

The principal aim of DT is to develop a range of skills and knowledge to create and evaluate items as well as applying adaptations to improve their products. Manufacturing has the specific aim of being able to develop knowledge of the process of manufacturing a product and how this can be applied in a real world, work setting.

Know about and be able to apply the plan, do, review strategy.

Express ideas and opinions about a range of production lines

Gain the skills to work as part of a production line to create a product.

RRS - UNCRC Relating Articles (Use within your teaching and planning)

- Article 6- Governments must do all they can to ensure that children survive and develop to their full potential. (developing employment opportunities)
- Article 13- Freedom of information. (students will develop opinions on different types of production lines)
- Article 23- Children with a disability have the right to live independently where possible (Students will develop skills to support themselves independently.)

Key elements	B2 P Step 4 - P6	B2 P Step P7 - P8	B2 NC Step 1-2
	<ul style="list-style-type: none"> • Engage with both mechanical and human production lines • Explore and compare a range of classic, automated and intermittent production lines. • Compare real life productions. • Explore different positions on a production line, • Communicate which positions they prefer and which they feel they are good at. • Communicate areas they feel are their strength • Know that different people have different strengths • Work as part of a team to create items • Follow a set of instructions to complete a production line task • Communicate how they feel the tasks went • Create a range of products for sale. 	<ul style="list-style-type: none"> • Engage and evaluate both mechanical and human production lines • Compare and contrast a range of classic, automated and intermittent production lines • Compare real life productions and evaluate which is more effective • Engage with a range of positions on a production line • Evaluate which position they and their peers are best at. • Communicate how having different skills allows for improved quality • To be able to identify who would be most effective in different areas of a production line • Work as part of a team to create items for NRGco • Use symbols to create a set of instruction for an area of a production line. • Evaluate the quality of products created. 	<ul style="list-style-type: none"> • Evaluate mechanical and human production lines and advantages of both. • Evaluate a range of classic, automated and intermittent production lines. • Evaluate the effectiveness of real life productions on efficiency and quality of outcome. • Experience a range of positions in a production line • Evaluate their own and their peers strengths and weaknesses • Identify where they would be most effective within a production line • Identify how using individual strengths will improve the quality and speed of production • Create items for the NRGco as part of a team. • Evaluate the quality of products produced. • Create a set of instructions for a section of a production line. • Follow a set of instructions to work as part of a production line.

	<p>To know that specific materials are used to create a product</p> <p>To know That completing an activity is part of creating a product.</p> <p>To know that production lines create a product</p>	<p>To know that there are different types of production lines</p> <p>To know that different parts of a production line have a different function</p> <p>To know that customers want high quality products</p>	<p>To know that there are different types of production lines and be able to describe differences between types</p> <p>To know that different people have different skills</p> <p>To know that the production line can affect the quality of products.</p>
	<p>Is able to communicate if they like or dislike an activity</p> <p>Is able to select a required material by matching it to a picture.</p> <p>Is able to observe a mechanical production line.</p> <p>Is able to complete a one step activity which has been modelled to them.</p> <p>Is able to Work alongside other people to create a product</p>	<p>Is able to compare different quality products</p> <p>Is able to select required materials using symbols</p> <p>Is able to work alongside others to create a product</p> <p>Is able to evaluate a finished product</p> <p>Is able to follow a simple activity following modelling</p> <p>Is able to complete a simple activity using visual instructions</p>	<p>Is able to compare production lines and choose best type for an activity</p> <p>Is able to identify a strength in their own work</p> <p>Is able to identify how a production line speeds up production</p> <p>Is able to compare high and low quality products</p> <p>Is able to evaluate a finished product</p> <p>Is able to follow a multiple step instruction</p>

<p>Suggested teaching activities</p>	<ul style="list-style-type: none"> • Experience a range of activities from a production line • Compare 2 products of different qualities • Vary position on a production line • Trips to factories • Videos of a range of types of production line • Creating products to sell for NRGco •
---	---

Resources in school
All resources can be found in the DT room.

Evidencing Work
There must be a **balance** between practical and worksheet based work. Each new skill must be taught using practical style lessons with the use of physical resources.